

CLAIMS

1. Use of benzoquinones as the only oxidant in agents for oxidative treatment of hair.
- 5 2. Use as defined in claim 1, characterized in that the benzoquinone used is p-benzoquinone, o-benzoquinone or a water-soluble derivative or salt thereof.
3. Use as defined in claim 2, characterized in that the water-soluble benzoquinone derivative is dihydroxybenzoquinone or tetrahydroxybenzoquinone.
- 10 4. Use as defined in claim 3, characterized in that the benzoquinone derivative used is 2-hydroxy-1,4-benzoquinone, 3-hydroxy-1,2-benzoquinone, 2,5-dihydroxy-1,4-benzoquinone, 3,4-dihydroxy-1,2-benzoquinone, tetrahydroxy-1,4-benzoquinone or tetrahydroxy-1,2-benzoquinone.
- 15 5. Use as defined in one of claims 1 to 4, characterized in that the benzoquinone, the salt or the derivative thereof is used in an amount from 1 to 5 weight percent.
6. Use as defined in one of claims 1 to 5, characterized in that the benzoquinone, the derivative or the salt thereof is used at a pH of 2.5 to 7.5.
- 20 7. Use as defined in one of claims 1 to 6, characterized in that the agent for oxidative treatment of hair is a permanent hair-shaping fixing agent.
- 25 8. Agent for oxidative treatment of hair, characterized in that it contains at least one o-benzo-quinone, selected from among o-benzoquinone and derivatives or salts thereof.
9. Agent for oxidative treatment of hair as defined in claim 8, characterized in that it has a pH in the range from 1.5 to 10 and contains:
- 30 (A) 0.5 to 10.0 wt. % of at least one o-benzoquinone, a derivative thereof or a salt

thereof, and

(B) 0.01 to 10 wt. % of at least one pH-adjusting agent.

10. Agent as defined in claim 9, characterized in that the pH-adjusting agent is
5 selected from among ammonia, an ammonium or alkali metal hydroxide, an ammonium
or alkali metal carbonate, an ammonium or alkali metal hydrogen carbonate, citric acid
and the salts thereof, phosphoric acid and the salts thereof or ascorbic acid and the salts
thereof, wherein alkali metal denotes sodium or potassium and the salts are chlorides,
carbonates, sulfates or phosphates.

10 11. Method for permanent hair shaping whereby the hair, before and/or after it has
been brought into the desired shape, is treated with a keratin-reducing shaping agent,
after which it is rinsed, then oxidatively post-treated with a fixing agent and again rinsed,
characterized in that the fixing agent used is an agent as defined in claim 8.